

3.2 Problem Management Activities

3.2.1 Trouble Ticket and Problem Tracking Scenario

3.2.1.1 Scenario Description

This scenario describes the life of a trouble ticket from ticket submission to problem resolution. In this example, a trouble ticket for a network that is running slow is submitted. This scenario begins once the user realizes the problem. It follows the ticket through submission, opening, analysis and resolution. The actors in this scenario are the User, Ops Supervisor, Technician and the ECS system.

3.2.1.2 Frequency

This scenario will run as needed. V0 Trouble Ticket statistics are approximately 2/day/DAAC. EP6 TT statistics are TBD. Remedy, using Sybase, is limited only by the capacity of Sybase.

3.2.1.3 Assumptions

1. The Ops Supervisor continuously monitors for incoming Trouble Tickets.
2. The Technician periodically checks for E-mail for notifications of assigned Trouble Tickets.
3. In this scenario, the Ops Supervisor and the Technician can assign any status or priority to a Trouble Ticket. This will be configurable at each DAAC.
4. For an internal submission the User, now called the Operator (someone at a DAAC), would log into Remedy, fill out the two required fields (Short Description and Submitter ID), fill out any other helpful fields (e.g. Software Resource), and click on apply. The User's information will automatically be inserted and the scenario would start at step 6.
5. For EOC Trouble Ticketing, the procedural methods and layouts will be the same as those at a DAAC (dealt with here).
6. TTs are not automatically assigned to the individual that will perform the fix in Release A.
7. Fields required for TT submission (Short Description and Submitter ID) are provided.
8. There is no convention in Remedy to physically attach a file to a TT. To achieve this effect, one would send E-mail with the file attached. The body of the message should indicate TT number, submitter ID and any relevant information pertaining to the attachment. This will be documented in "Help."
9. These steps are an outline for the lifecycle of an average TT. The system has been configured such that each site will have the flexibility to create a lifecycle from this example which best fits their needs.
10. There are two ways for a site to share TT information with another site. The first is to forward a TT to the other site thereby opening a new TT there. The second is to E-mail

this information to the other site allowing them to review it without it being logged into Remedy.

11. If there needs to be more communication between individuals in working the TT, they may do so as needed.
12. Groups can be Ops Supervisor, TT Review Board Chair, and TT Review Board.
13. The TT Review Board can suggest, comment, reject, approve or otherwise recommend actions as they deem necessary.
14. Escalation times can be set at each site to send E-mail to particular group for different statuses and priorities.

3.2.1.4 Components

Figure 3.2.1.4-1 indicates the interaction between the DAAC personnel and the ECS subsystems.

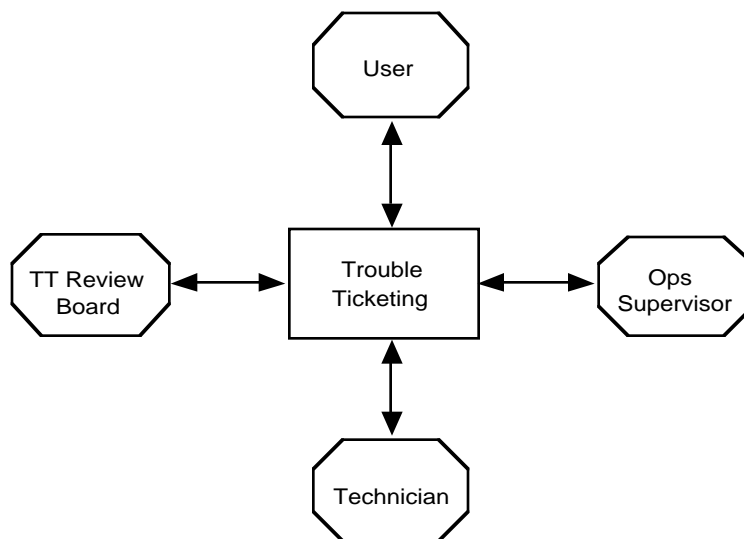


Figure 3.2.1.4-1. Trouble Ticket Scenario Components

3.2.1.5 Preconditions

Preconditions for this scenario are a Trouble Ticket must be submitted, a Ops Supervisor must be monitoring for incoming Trouble Tickets, Remedy should be running normally.

3.2.1.6 Detailed Steps of Process

Table 3.2.1.6-1 represents the details of this scenario. The times and duration given are approximate.

Table 3.2.1.6-1. Trouble Ticket Scenario Process (1 of 4)

Step	Time (mins)	User	Operator (Ops Supervisor, Technician)	ECS System	Figure
1	<1	Upon realization that a problem exists, a user selects the Trouble Ticket icon from the ECS Desktop.		ECS Desktop invokes user-preferred browser with Trouble Ticketing home page URL.	
2	<1	User views Trouble Ticketing HTML home page options.		(Options: Submit TT, List TTs)	3.2.1.6-1
3	<1	User selects the Submit Option.		System calls Trouble Ticket Submit page. System automatically retrieves user information from database. (e.g., e-mail address, name, phone number, etc.). If this information is not correct, then it can be corrected via User Services.	
4	<5	User enters problem impact, problem short description, and problem long description.			3.2.1.6-2
5	<1	Satisfied with entry, user then clicks on the submit button to submit TT.			
6	<1			System creates new entry in Remedy, notifies Ops Supervisor, displays successful submission HTML page (except for internal submissions) which includes the TT number, and notifies User via e-mail which will also include TT number. Rules for the notification via e-mail will be configurable at each DAAC.	3.2.1.6-3

Step	Time (mins)	User	Operator (Ops Supervisor, Technician)	ECS System	Figure
7	<1	User receives e-mail verifying that the TT was submitted.	Ops Supervisor receives notification that a new Trouble Ticket has entered the system.		
8	<1		Ops Supervisor refreshes TT list to check for most recent TTs.	System (Remedy) refreshes list.	3.2.1.6-4
9	<1		Ops Supervisor selects TT for work and opens it.	System (Remedy) opens TT.	3.2.1.6-5
10	<5		Reports and diagnostics of TTs can be generated through Remedy to help in resolving problem (optional).		Configurable
11	<5		On examining the detailed information, the Ops Supervisor changes the value of Ticket Status from New to Assigned.	(Options: Assigned, Forwarded)	
12	<1		The Ops Supervisor assigns the value of Low to the Assigned-Priority field.	(Options: Low, Medium, High)	
13	<1		The Ops Supervisor assigns the Trouble Ticket to a particular Technician to fix the problem.		
14	<1		The Ops Supervisor clicks on Apply to carry out these new changes.	System (Remedy) delivers e-mail to Technician.	3.2.1.6-6
15	<1		The Technician receives e-mail notifying him/her of the assignment.		
16	<3		The Technician inputs an initial entry into the Resolution Log (which is a free text diary) indicating the proposed course of action.		

Step	Time (mins)	User	Operator (Ops Supervisor, Technician)	ECS System	Figure
17	<1		The Technician then clicks on Apply to update the TT with this status.	System (Remedy) updates TT.	
18	30		As the Technician analyzes and attempts to resolve the issue that the TT addresses, the Technician updates the Resolution Log with pertinent information.		
19	<1		Each update to the Resolution Log is followed by a click on the Apply button to commit the update.	System (Remedy) updates Resolution Log with time/date, name of modifier, and current log.	
20	<1		When a solution is found, the Technician changes the Ticket Status to "Solution Proposed."	(Options: Solution Proposed)	
21			The TT Review Board Chair compiles a package of new "Solution Proposed" TTs for review by the board.		
22			The TT Review Board considers the sensibility and long term effects of the proposed solution for this TT.		
23			The TT Review Board approves the solution and changes the Status to "Implement Solution." If the TT Review Board found this to be a configuration issue, they would generate a CCR and proceed as in the Custom Software Problem Scenario.	(Options: Forwarded, Closed, Implement Solution)	

24			The Technician fixes the problem and changes Status to "Solution Implemented."		
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Step	Time (mins)	User	Operator (Ops Supervisor, Technician)	ECS System	Figure
25	<1		The TT Review Board approves fix, selects "Key Words," "Closing Code," "Hardware Resource," and/or "Software Resource" values as applicable, and upon User Verification Closes TT.		3.2.1.6-7
26	<1	The User receives e-mail notifying him/her of the TT being closed.			

3.2.1.7 Postconditions

Network is executing normally and Trouble Ticket remains in database for future reference.

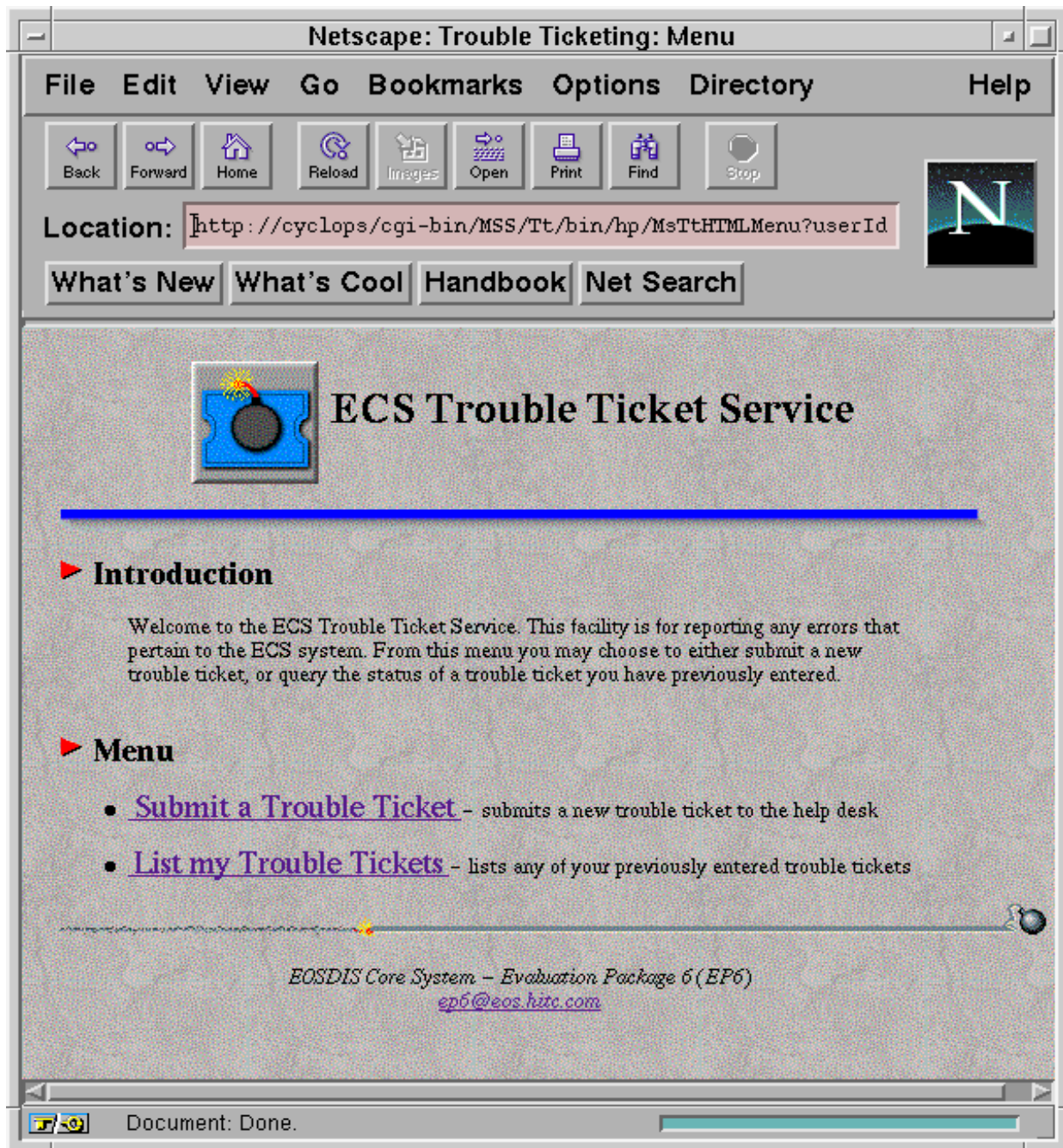


Figure 3.2.1.6-1. Trouble Ticketing Home Page

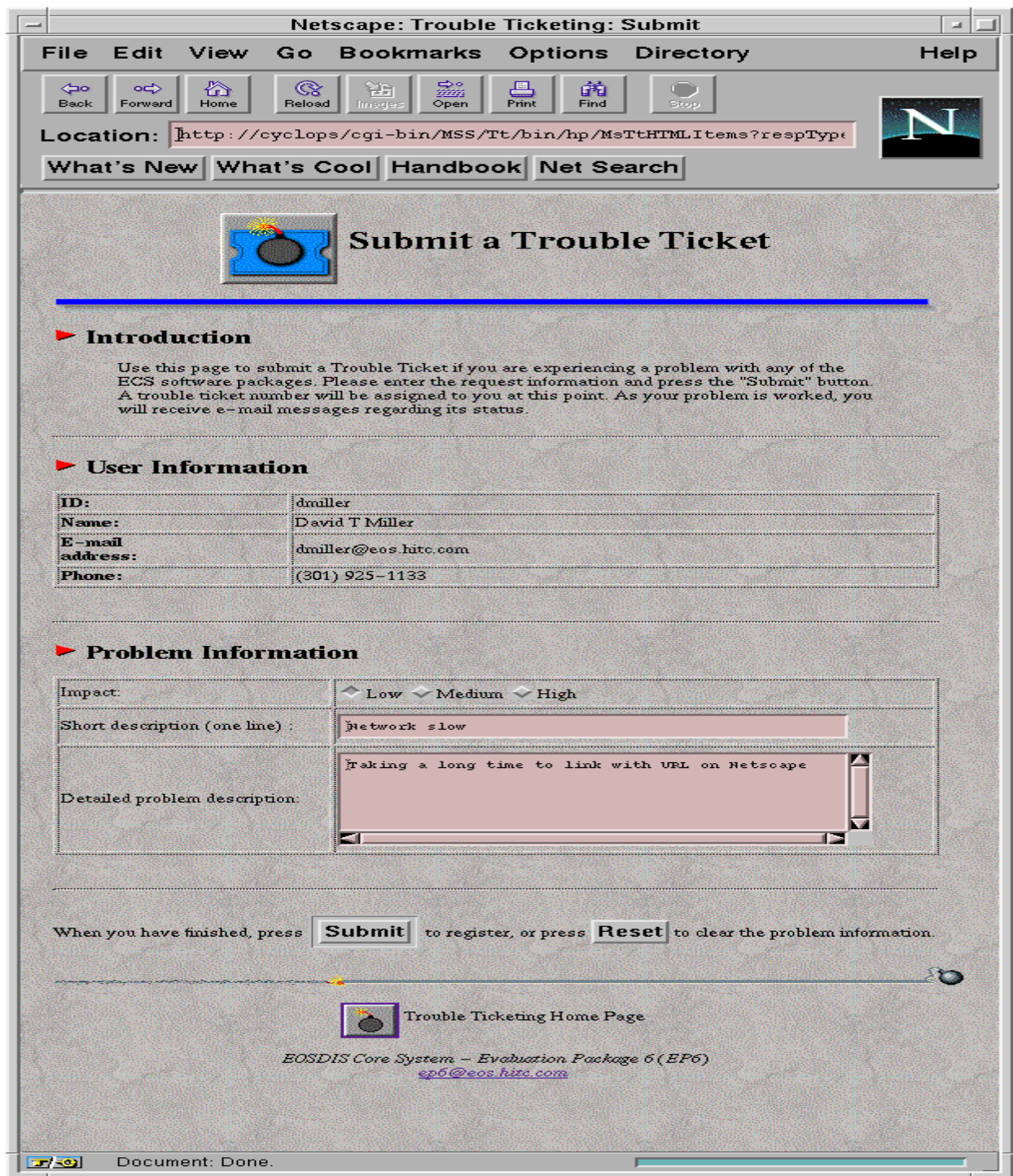


Figure 3.2.1.6-2. Trouble Ticket Submit Page

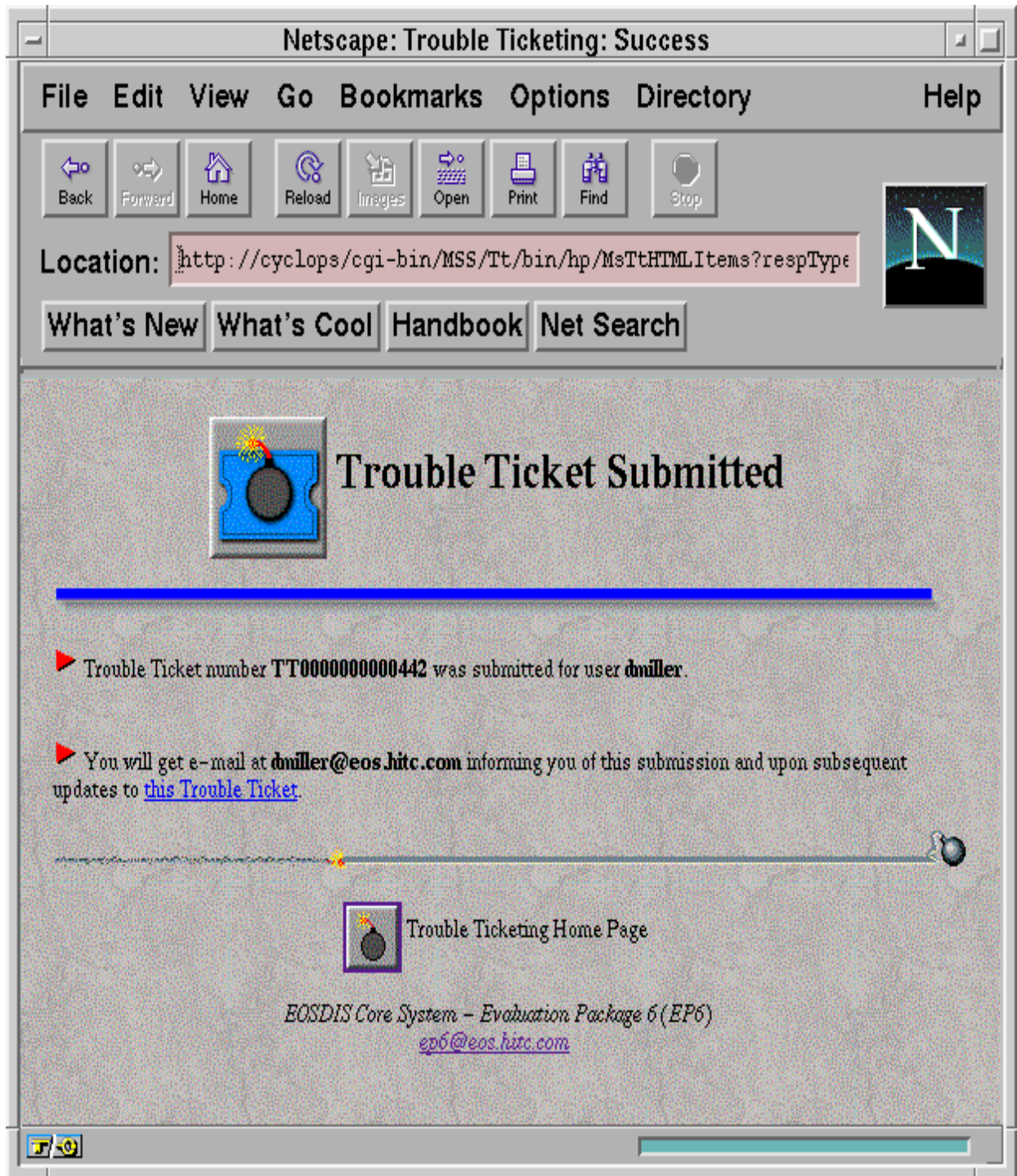


Figure 3.2.1.6-3. Trouble Ticket Confirmation Page

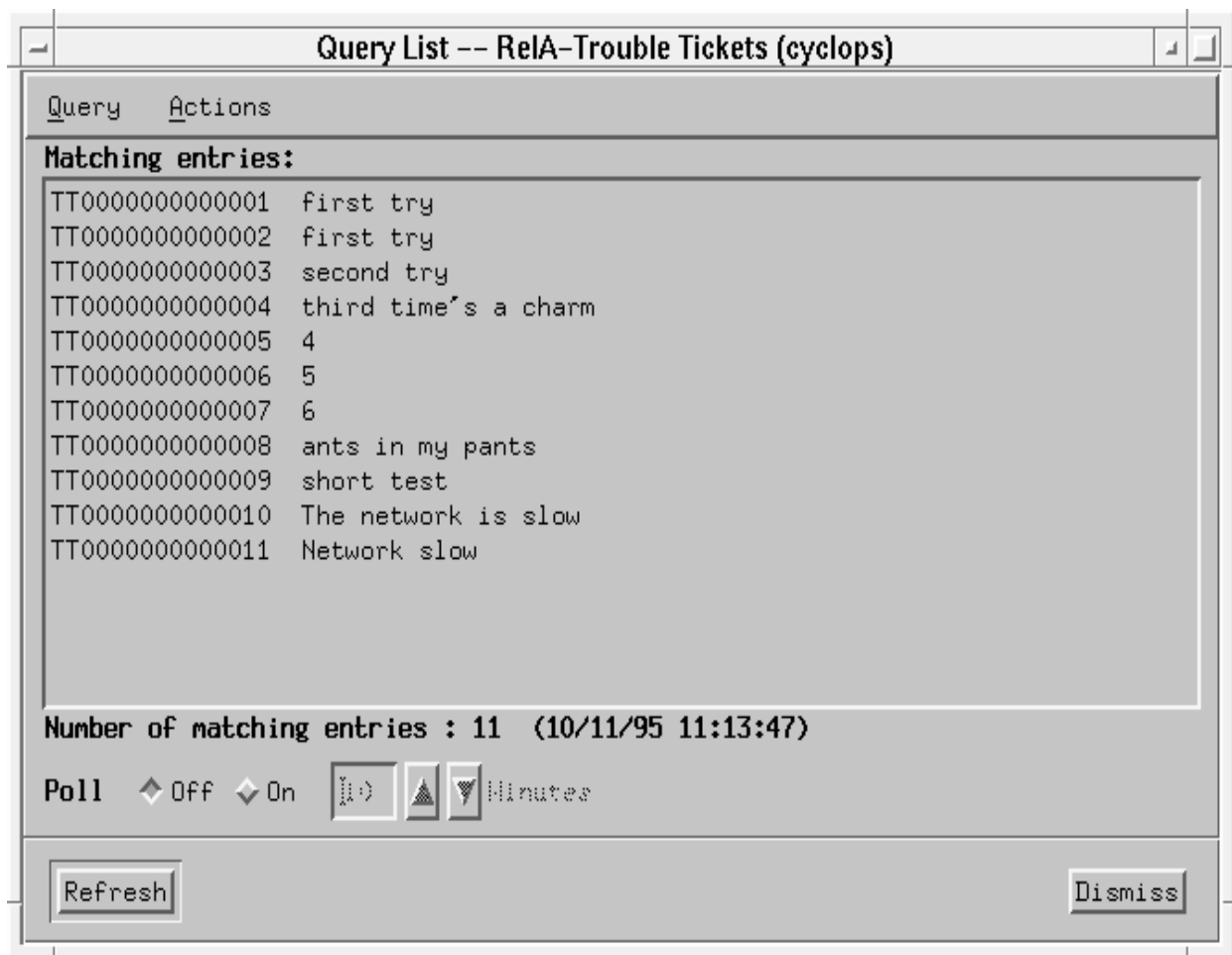


Figure 3.2.1.6-4. Trouble Ticket List

Modify Individual -- RelA-Trouble Tickets (cyclops)

Actions

Ticket-Id: TT0000000000011 Ticket Status: New Assigned-Priority: Low

Short Description: Network slow Submitter Impact: Low

Long-Description: Taking a long time to link with URL on Netscape

Resolution Log:

Submitter ID: jdmiller Assigned-To: Help Desk Closing Code:

Submitter Name: David T Miller Last-modified-by: Help Desk Rejection Code:

Submitter Phone: (301) 925-1133 Create-date: 10/11/95 11:13:38 Closed/Rejected-by:

Submitter eMail: jdmiller@eos.hitc.com Modified-date: 10/11/95 11:13:38 Close/Rejection-date:

Submitter Home DAAC: Forwarded-to: Software Resource:

History: Key Words: Hardware Resource:

Number 1 of 1

Apply Previous Next Dismiss

Figure 3.2.1.6-5. Trouble Ticket New

Modify Individual -- RelA-Trouble Tickets (cyclops)

Actions

Ticket-Id: TT0000000000011 Ticket Status: Assigned Assigned-Priority: Low

Short Description: Network slow Submitter Impact: Low

Long-Description: Taking a long time to link with URL on Netscape

Resolution Log

Submitter ID: dmiller Assigned-To: Technician Closing Code:

Submitter Name: David T Miller Last-modified-by: Help Desk Rejection Code:

Submitter Phone: (301) 925-1133 Create-date: 10/11/95 11:13:38 Closed/Rejected-by:

Submitter eMail: dmiller@eos.hitc.com Modified-date: 10/11/95 11:16:07 Close/Rejection-date:

Submitter Home DAAC: Forwarded-to: Software Resource:

History: Key Words: Hardware Resource:

Number 1 of 1

Apply Previous Next Dismiss

Figure 3.2.1.6-6. Trouble Ticket Assigned

Modify Individual -- RelA-Trouble Tickets (cyclops)

Actions

Ticket-Id Ticket Status Assigned-Priority

Short Description Submitter Impact

Long-Description

Resolution Log

Submitter ID Assigned-To Closing Code

Submitter Name Last-modified-by Rejection Code

Submitter Phone Create-date Closed/Rejected-by

Submitter eMail Modified-date Close/Rejection-date

Submitter Home DAAC

Forwarded-to

Software Resource

History Key Words Hardware Resource

Number 1 of 1

Apply Previous Next Dismiss

Figure 3.2.1.6-7. Trouble Ticket Closed